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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,101

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Takahiro Ibe

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06/26/2006

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EXAMINER

PATEL, ASHOK

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/763,101

**Applicant(s)**

IBE, TAKAHIRO

**Examiner**

Ashok Patel

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5 pages</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> .           |

Continuation of Attachment(s) 6). Other: Complete English translation copy of Japanese document 06-176870.

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1. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Osamu et al (Japanese document, 06-176870, of record).

As to claims 1-4, Osamu et al disclose applicant's claimed electroluminescent (EL) device (Figures 1, 2) including: a first (top) electrode (12, 22) formed over a substrate (11, 22); a first electroluminescent film (14, 24) in contact with the first

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electrode, a second (middle) electrode (15, 25) in contact with the first electroluminescent film; a second electroluminescent film (16, 27) in contact with the second electrode; and a third (bottom) electrode (18, 28) in contact with the second electroluminescent film, wherein

electrodes including the first electrode and the third electrode are electrically connected and function as one (anode, as shown in Figure 1) of an anode or a cathode and the second electrode functions as the other (cathode, as shown in Figure 2) of the anode or the cathode, and

wherein an electric current flow direction through the first electroluminescent film is different from that through the second electroluminescent film.

Note that the electric current flow direction in Osamu et al.'s EL device through the first electroluminescent one has to be different from that of the second electroluminescent film in view of polarity of the electrodes.

As to claims 13 and 14, applicant is claiming an electric appliance including the EL device of claims 1-4, which is not disclosed by Osamu et al. It has been held that a recitation with respect to the manner in which a claimed EL device apparatus is intended to be employed/used does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed

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structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Therefore, the intended use limitation is not afforded any patentable weight.

Additionally/alternatively as to claim 13 and 14, a recitation of the intended use of claimed invention within an electric apparatus must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it means the claim, In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Therefore, the intended use limitation is not afforded any patentable weight.

5. Claim 6-8, 11 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Osamu et al, as applied to claim 1-4.

As to claims 6-8, Osamu et al's EL device inherently transmits light either from top or bottom or both the top and bottom satisfying applicant's at least one of claims 6-8.

Alternatively, although Osamu et al do not disclose the EL device explicitly transmitting the light from top or bottom or both the top and bottom, as recited in applicant's claims 6-8, it would have been obvious to one of ordinary skill in the art to modify

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Osamu et al's EL device for transmitting the light from either top or bottom or both side the top and bottom sides simply by selecting the suitable transparent component on the transmission side and opaque material on the opposite side, or both the top and bottom components transparent in case both sides need to emit light.

As to claim 11, alternatively, although Osamu et al do not disclose the anode and cathode made of materials with work function range as claimed by applicant in claim 11, providing the anodes and cathodes of respectively high and low work functions is known in the EL device art due to their physical properties.

6. Claims 9, 12, 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osamu et al, as applied to claims 1-4.

As to claim 9, Osamu et al do not appear to disclose at least two electroluminescent elements emitting different light, as claimed by applicant. However, since use of different electroluminescent material is old and well known in the EL device art for emitting different colors, it would have been obvious to one of ordinary skill in the art to use different suitable EL elements for providing different colors from the EL device.

As to claim 12, although Osamu et al do not disclose the materials of anode and cathode in Osamu et al's EL device, as what is claimed by applicant, selecting any suitable known prior art

materials for the anode and cathode would have been a matter of obvious alternative choice to one of ordinary skill in the art, since applicant's claimed material for the anode and cathode do not produce critical and unobvious results over material selection of prior art EL device.

As to claims 15-18, these claims are substantially similar to claims 1-4 (as mentioned earlier in this office action) except that claims 15-19 further recite electron and holes being injected into respective electroluminescent films. Note that applicant's claims 15-16 do not recite the EL device including structure of the electron injecting layer or hole injecting layer within the claimed device.

Although, Osamu et al disclose hole being injected from hole injecting layer into the electroluminescent layers (Figures 3 and 4), Osamu et al do not disclose the electron being injected as claimed by applicant. However, providing the electron injecting layer (just like providing the hole injecting layer) is known in the art for injecting the electrons into the electroluminescent layer, one of ordinary skill in the art would have modified Osamu et al's device by introducing the electron injecting layer appropriately for injecting the electrons into the electroluminescent layer.

As to claims 20-26, 30 and 31, limitations of these claims is similar to that of claims 6-8 and therefore rejected for reasons set forth in the (35 U.S.C. 103) rejection of claims 6-8.



As to claims 27-29, limitations of these claims is similar to that of claim 9 and therefore rejected for reasons set forth in the (35 U.S.C. 103) rejection of claim 9.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawai is cited for showing an EL device including multiple anodes, cathodes and EL layers.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ashok Patel  
Primary Examiner  
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